COMMERCE CONTROL LIST - NUMERICAL INDEX

Supplement No. 1 to part 774 -Index

(This index is not an exhaustive list of controlled items.)

ECCN	*Description*
0A001	*"Nuclear reactors", i.e. reactors capable of operation so as to maintain a controlled, self-sustaining fission chain reaction, and equipment and components specially designed or prepared for use in connection with a "nuclear reactor".*
0A002	*Power generating or propulsion equipment specially designed for use with space, marine or mobile "nuclear reactors". (These items are subject to the export licensing authority of the U.S. Department of State, Office of Defense Trade Controls. See 22 CFR part 121.)*
0A018	*Items on the International Munitions List.*
0A980	*Horses by sea.*
0A982	*Saps; thumbcuffs, leg irons, shackles, and handcuffs; straight jackets, plastic handcuffs police helmets and shields; and parts and accessories, n.e.s.*
0A983	*Specially designed implements of torture and thumbscrews; and parts and accessories, n.e.s.*
0A984	*Shotguns, barrel length 18 inches (45.72 cm) inches or over; buckshot shotgun shells; except equipment used exclusively to treat or tranquilize animals, and except arms designed solely for signal, flare, or saluting use; and parts, n.e.s.*
0A985	*Discharge type arms (for example, stun guns, shock batons, electric cattle prods, immobilization guns and projectiles, etc.) except equipment used exclusively to treat or tranquilize animals, and except arms designed solely for signal, flare, or saluting use; and parts, n.e.s.*
0A986	*Shotgun shells, except buckshot shotgun shells, and parts.*
0A987	*Optical sighting devices for firearms (including shotguns controlled by 0A984); and parts, n.e.s*
0A988	*Conventional military steel helmets as described by 0A018.f.1; and machetes.*
0A989	*Water cannon and specially designed components for water cannon.*
0B001	*Plant for the separation of isotopes of "natural uranium" and "depleted uranium", "special fissile materials" and "other fissile materials", and specially designed or prepared equipment and components therefor.*
0B002	*Specially designed or prepared auxiliary systems, equipment and components, as follows, (see List of Items Controlled) for isotope separation plant specified in 0B001, made of or protected by UF6 resistant materials.*
0B003	*Plant for the production of uranium hexafluoride (UF6) and specially designed or prepared equipment and components therefor.*
0B004	*Plant for the production of heavy water, deuterium or deuterium compounds, and specially designed or prepared equipment and components therefor.*

0B005	*Plant specially designed for the fabrication of "nuclear reactor" fuel elements and specially designed equipment therefor.*
0B006	*Plant for the reprocessing of irradiated "nuclear reactor" fuel elements, and specially designed or prepared equipment and components therefor.*
0B008	*Equipment for "nuclear reactors".*
0B009	*Plant for the conversion of uranium and equipment specially designed or prepared therefor.*
0B986	*Equipment specially designed for manufacturing shotgun shells; and ammunition hand-loading equipment for both cartridges and shotgun shells.*
0C001	*Natural uranium or depleted uranium or thorium in the form of metal, alloy, chemical compound or concentrate and any other material containing one or more of the foregoing.*
0C002	*"Special fissile materials" and "other fissile materials"; except, four "effective grams" or less when contained in a sensing component in instruments.*
0C004	*Deuterium, heavy water, deuterated paraffins and other compounds of deuterium, and mixtures and solutions containing deuterium, in which the isotopic ratio of deuterium to hydrogen exceeds 1:5000.*
0C005	*Graphite, nuclear-grade, having a purity level of less than 5 parts per million "boron equivalent" and with a density greater than 1.5 g/cm3.0*
0C006	*Nickel powder or porous nickel metal, specially prepared for the manufacture of gaseous diffusion barriers.*
0C201	*Specially prepared compounds or powders, other than nickel, resistant to corrosion by UF6 (e.g. aluminum oxide and fully fluorinated hydrocarbon polymers), for the manufacture of gaseous diffusion barriers, having a purity of 99.9 weight percent or more and a mean particle size of less than 10 micrometers measured by American Society for Testing and Materials (ASTM) B330 standard and a high degree of particle size uniformity.*
0D001	*"Software" specially designed or modified for the "development", "production" or "use" of goods controlled by this category.*
0E001	*"Technology" according to the Nuclear Technology Note for the "development", "production" or "use" of items controlled by this category.*
0E018	*"Technology" for the "development", "production", or "use" of items controlled by 0A018.b through 0A018.e.*
0E984	*"Technology" for the "development" or "production" of shotguns controlled by 0A984 and buckshot shotgun shells.*
1A001	*Components made from fluorinated compounds.*
1A002	*"Composite" structures or laminates.*
1A003	*Manufactures of non-fluorinated polymeric substances controlled by 1C008.a.3 in film, sheet, tape or ribbon form.*
1A004	*Protective and detection equipment and components, not specially designed for military use. (These items are subject to the export licensing authority of the U.S. Department of State, Office of Defense Trade Controls. See 22 CFR part 121.)*

1A005	*Body armor, and specially designed components therefor, not manufactured to military standards or specifications, or to their equivalents in performance.*
1A102	*Resaturated pyrolized carbon-carbon materials designed for "missiles". (These items are subject to the export licensing authority of the U.S. Department of State, Office of Defense Trade Controls. See 22 CFR part 121.).*
1A202	*Composite structures, other than those controlled by 1A002, in the form of tubes with an inside diameter of between 75 mm and 400 mm made with any of the "fibrous or filamentary materials" specified in 1C210.a or with carbon prepreg materials controlled by 1C210.c.*
1A225	*Platinized catalysts specially designed or prepared for promoting the hydrogen isotope exchange reaction between hydrogen and water for the recovery of tritium from heavy water or for the production of heavy water.*
1A226	*Specialized packings for use in separating heavy water from ordinary water and made of phosphor bronze mesh (chemically treated to improve wettability) and designed for use in vacuum distillation towers.*
1A227	*High-density (lead glass or other) radiation shielding windows greater than 0.09 m2 on cold area and with a density greater than 3 g/cm3 and a thickness of 100 mm or greater; and specially designed frames therefor.*
1A290	*Depleted uranium (any uranium containing less than 0.711%of the isotope U-235) in shipments of more than 1,000 kilograms in the form of shielding contained in X-ray units, radiographic exposure or teletherapy devices, radioactive thermoelectric generators, or packaging for the transportation of radioactive materials.*
1A984	*Chemical agents, including tear gas formulation containing 1 percent or less of orthochlorobenzalmalononitrile (CS), or 1 percent or less of chloroacetophenone (CN), except in individual containers with a net weight of 20 grams or less; smoke bombs; non-irritant smoke flares, canisters, grenades and charges; other pyrotechnic articles having dual military and commercial use; and fingerprinting powders, dyes and inks.*
1B001	*Equipment for the production of fibers, prepregs, preforms or "composites" controlled by 1A002 or 1C010, and specially designed components and accessories therefor.*
1B002	*Systems and components therefor, specially designed to avoid contamination and specially designed for producing metal alloys, metal alloy powder or alloyed materials controlled by 1C002.a.2, 1C002.b or 1C002.c.*
1B003	*Tools, dies, molds or fixtures, for "super plastic forming" or "diffusion bonding" titanium or aluminum or their alloys.*
1B018	*Equipment on the International Munitions List.*
1B101	*Equipment, other than that controlled by 1B001, for the "production" of structural composites, and specially designed components and accessories therefor.*
1B115	*"Production equipment" for the production, handling or acceptance testing of liquid propellants or propellant constituents controlled by 1C011, 1C111 or on the U.S. Munitions List, and specially designed components therefor.*

1B116	*Specially designed nozzles for producing pyrolitically derived materials formed on a mold, mandrel or other substrate from precursor gases which decompose in the 1,573 K (1,300oC) to 3,173 K (2,900o C) temperature range at pressures of 130 Pa to 20 kPa.*
1B117	*"Production equipment", as follows (see List of Items Controlled), for the production, handling or acceptance testing of solid propellants or propellant constituents controlled by 1C011, 1C111 or on the U.S. Munitions List.*
1B201	*Filament winding machines, other than those controlled by1B001 or 1B101, in which the motions for positioning, wrapping, and winding fibers are coordinated and programmed in two or more axes, specially designed to fabricate composite structures or laminates from "fibrous or filamentary materials" and capable of winding cylindrical rotors of diameter between 75 mm and 400 mm and lengths of 600 mm or greater and coordinating and programming controls and precision mandrels therefor.*
1B225	*Electrolytic cells for fluorine production with a production capacity greater than 250 g of fluorine per hour.*
1B226	*Electromagnetic isotope separators, designed for or equipped with, single or multiple ion sources capable of providing a total ion beam current of 50 mA or greater.*
1B227	*Ammonia synthesis converters or ammonia synthesis units in which the synthesis gas (nitrogen and hydrogen) is withdrawn from an ammonia/hydrogen high-pressure exchange column and the synthesized ammonia is returned to that column.*
1B228	*Hydrogen-cryogenic distillation columns.*
1B229	*Water-hydrogen sulphide exchange tray columns constructed from fine carbon steel with a diameter of 1.8 m or greater, which can operate at a nominal pressure of 2 MPa or greater, and internal contactors therefor.*
1B230	*Pumps circulating solutions of diluted or concentrated potassium amide catalyst in liquid ammonia (KNH2/NH3).*
1B231	*Tritium facilities, plant or equipment.*
1B232	*Turboexpanders or turboexpander-compressor sets designed for operation below 35 K (-238_ C) and a throughput of hydrogen gas of 1000 kg/hr or greater.*
1B233	*Lithium isotope separation facilities, plant and equipment.*
1C001	*Materials specially designed for use as absorbers of electromagnetic waves, or intrinsically conductive polymers.*
1C002	*Metal alloys, metal alloy powder and alloyed materials*
1C003	*Magnetic metals, of all types and of whatever form.*
1C004	*Uranium titanium alloys or tungsten alloys with a "matrix" based on iron, nickel or copper.*
1C005	*"Superconductive" "composite" conductors in lengths exceeding 100 m or with a mass exceeding 100 g.*
1C006	*Fluids and lubricating materials.*

1C007	*Ceramic base materials, non-"composite" ceramic materials, ceramic-"matrix" "composite" materials and precursor materials.*
C008	*Non-fluorinated polymeric substances.*
1C009	*Unprocessed fluorinated compounds.*
1C010	*"Fibrous or filamentary materials" which may be used inorganic "matrix", metallic "matrix" or carbon "matrix" "composite" structures or laminates.*
1C011	*Metals and compounds.*
1C012	*Materials for nuclear heat sources.*
1C018	*Materials on the International Munitions List.*
1C101	*Materials and devices for reduced observables such as radar reflectivity, ultraviolet/infrared signatures, and acoustic signatures, other than those controlled by 1C001, usable in "missiles" and their subsystems.*
1C107	*Graphite and ceramic materials, other than those controlled by 1C007.*
1C111	*Propellants and constituent chemicals for propellants, other than those controlled by 1C011.*
1C116	*Maraging steels (steels generally characterized by high nickel, very low carbon content and the use of substitutional elements or precipitates to produce age-hardening) having an ultimate tensile strength of 1,500 MPa or greater, measured at 293 K (20o C), in the form of sheet, plate or tubing with a wall or plate thickness equal to or less than 5 mm.*
1C117	*Tungsten, molybdenum and alloys of these metals in the form of uniform, spherical or atomized particles of 500 micrometer diameter or less with a purity of 97% or greater for fabrication of rocket motor components, i.e., heat shields, nozzle substrates, nozzle throats and thrust vector control surfaces.*
1C118	*Titanium-stabilized duplex stainless steel (Ti-DSS):*
1C202	*Alloys, other than those controlled by 1C002.a.2.c. or d.*
1C210	*"Fibrous or filamentary materials" or prepregs, other than those controlled by 1C010.a, .b or .e.*
1C216	*Maraging steel, other than that controlled by 1C116.*
1C225	*Boron and boron compounds, mixtures and loaded materials in which the boron-10 isotope is more than 20% by weight of the total boron content.*
1C226	*Parts made of tungsten, tungsten carbide, or tungsten alloys (greater than 90% tungsten) having a mass greater than 20 kg and a hollow cylindrical symmetry (including cylinder segments) with an inside diameter greater than 100 mm but less than 300 mm, except parts specially designed for use as weights or gamma-ray collimators.*
1C227	*Calcium (high purity) containing both less than 1,000parts per million by weight of metallic impurities other than magnesium and less than 10 parts per million of boron.*
1C228	*Magnesium (high purity) containing both less than 200parts per million by weight of metallic impurities other than calcium and less than 10 parts per million of boron.*

1C229	*High purity (99.99% or greater) bismuth with very low silver content (less than 10 parts per million).*
1C230	*Beryllium metal, alloys containing more than 50% of beryllium by weight, beryllium compounds, or manufactures thereof, including waste and scrap containing beryllium metal, alloys, or compounds.*
1C231	*Hafnium metal, alloys and compounds of hafnium containing more than 60% hafnium by weight and manufactures thereof.*
1C232	*Helium-3 or helium isotopically enriched in the helium-3isotope, mixtures containing helium-3, or products or devices containing any of the foregoing, except a product or device containing less than 1 g of helium-3.*
1C233	*Lithium enriched in the 6 isotope (6Li) to greater than7.5 atom percent, alloys, compounds or mixtures containing lithium enriched in the 6 isotope, or products or devices containing any of the foregoing except thermoluminescent dosimeters.*
1C234	*Zirconium with a hafnium content of less than 1 part hafnium to 500 parts zirconium by weight, in the form of metal, alloys containing more than 50% zirconium by weight, or compounds, or manufactures wholly thereof; except zirconium in the form of foil having a thickness not exceeding 0.10 mm.*
1C235	*Tritium, tritium compounds, mixtures containing tritiumin which the ratio of tritium to hydrogen by atoms exceeds 1 part in 1000, or products or devices containing any of the foregoing; except, a product or device containing not more than 1.48 x 103 GBq (40 Ci) of tritium in any form.*
1C236	*Alpha-emitting radionuclides having an alpha half-life of10 days or greater but less than 200 years, compounds or mixtures containing any of these radionuclides with a total alpha activity of 37 GBq/kg (1 Ci/kg) or greater, or products or devices containing any of the foregoing, except a product or device containing less than 3.7 GBq (100 millicuries) of alpha activity.*
1C237	*Radium-226, radium-226 compounds, mixtures containingradium-226, or products or devices containing any of the foregoing, except medical applicators, or products or devices containing not more than 0.37 GBq (10 millicuries) of radium-226 in any form.*
1C238	*Chlorine trifluoride (ClF3).*
1C239	*High explosives, other than those controlled by the U.S. Munitions List, or substances or mixtures containing more than 2% thereof, with a crystal density greater than 1.8 gm per cm3 and having a detonation velocity greater than 8,000 m/s.*
1C240	*Nickel powder or porous nickel metal, other than those controlled by 0C006.*
1C350	*Chemicals that may be used as precursors for toxic chemical agents.*
1C351	*Human pathogens, zoonoses, and "toxins".*
1C352	*Animal pathogens.*
1C353	*Genetically modified "microorganisms".*
1C354	*Plant pathogens.*
1C355	*Chemical Weapons Convention (CWC) Schedule 2 and 3chemicals and families of chemicals, not controlled by ECCN 1C350 or by the Department of State under the ITAR.*

1C980	*Inorganic chemicals listed in Supplement No. 1 to part754 of the EAR that were produced or derived from the Naval Petroleum Reserves (NPR) or became available for export as a result of an exchange of any NPR produced or derived commodities.*
1C981	*Crude petroleum including reconstituted crude petroleum, tar sands & crude shale oil listed in Supplement No. 1 to part 754 of the EAR.*
1C982	*Other petroleum products listed in Supplement No. 1 to part 754 of the EAR that were produced or derived from the Naval Petroleum Reserves (NPR) or became available for export as a result of an exchange of any NPR produced or derived commodities.*
1C983	*Natural gas liquids and other natural gas derivatives listed in Supplement No. 1 to part 754 of the EAR that were produced or derived from the Naval Petroleum Reserves (NPR) or became available for export as a result of an exchange of any NPR produced or derived commodities.*
1C984	*Manufactured gas and synthetic natural gas (except when commingled with natural gas and thus subject to export authorization from the Department of Energy) listed in Supplement No. 1 to part 754 of the EAR that were produced or derived from the Naval Petroleum Reserves (NPR) or became available for export as a result of an exchange of any NPR produced or derived commodities.*
1C988	*Western red cedar (thuja plicata), logs and timber, and rough dressed and worked lumber containing wane listed in Supplement No. 2 to part 754 of the EAR.*
1C990	*Fibrous and filamentary materials, not controlled by1C010 or 1C210, for use in "composite" structures and with a specific modulus of 3.18 x 106 m or greater and a specific tensile strength of 7.62 x 104 m or greater.*
1C991	*Vaccines containing items controlled by ECCNs 1C351, 1C352, 1C353, and 1C354 and immunotoxins.*
1C992	*Oil well perforators.*
1C995	*Mixtures containing precursor and intermediate chemicals used in the "production" of chemical warfare agents that are not controlled by ECCN 1C350.*
1C996	*Hydraulic fluids containing synthetic hydrocarbon oils, having all the following characteristics (see List of Items Controlled).*
1C998	*Detonation cords and equipment and explosive material*
1D001	*"Software" specially designed or modified for the "development", "production" or "use" of equipment controlled by 1B001 to 1B003.*
1D002	*"Software" for the "development" of organic "matrix", metal "matrix" or carbon "matrix" laminates or "composites".*
1D018	*"Software" specially designed or modified for the "development", "production", or "use" of items controlled by 1B018.*
1D101	*"Software" specially designed for the "use" of goods controlled by 1B101.*
1D102	*Other "software" not controlled by 1D001, 1D002, and1D103, specially designed for the "development", "production" or "use" of items controlled by 1A, 1B, and 1C for MT reasons.*
1D103	*"Software" specially designed for analysis of reduced observables such as radar reflectivity, ultraviolet/infrared signatures and acoustic signatures.*

1D201	*"Software" specially designed for the "use" of goods controlled by 1B201.*
1D390	*"Software" for process control that is specifically configured to control or initiate "production" of chemicals controlled by 1C350.*
1D993	*"Software" specially designed for the "development", "production", or "use" of equipment or materials controlled by 1C210.b or 1C990.*
1E001	*"Technology" according to the General Technology Note for the "development" or "production" of items controlled by 1A001.b, 1A001.c, 1A002, 1A003, 1A005, 1A102, 1B or 1C (except 1C355, 1C980 to 1C984, 1C988, 1C991, 1C992, 1C993, 1C994 and 1C995).*
1E002	*Other "technology".*
1E101	*"Technology" according to the General Technology Note for the "use" of goods controlled by 1A102, 1B001, 1B101, 1B115, 1B116, 1B117, 1C001, 1C007, 1C011, 1C101, 1C107, 1C111, 1C116, 1C117, 1C118, 1D101 or 1D103.*
1E102	*"Technology" according to the General Technology Note for the "development" of "software" controlled by 1D001, 1D101 or 1D103.*
1E103	*"Technical data" (including processing conditions) for the regulation of temperature, pressure or atmosphere in autoclaves or hydroclaves, when used for the "production" of "composites" or partially processed "composites".*
1E104	*"Technology" relating to the "production" of pyrolitically derived materials formed on a mold, mandrel or other substrate from precursor gases which decompose in the 1,573 K (1,300_ C) to 3,173 K (2,900_ C) temperature range at pressures of 130 Pa to 20 kPa.*
1E201	*"Technology" according to the General Technology Note for the "use" of goods controlled by 1A002, 1A202, 1A225 to 1A227, 1B201, 1B225 to 1B233, 1C002.a.2.c or .d, 1C010.b, 1C202, 1C210, 1C216, 1C225 to 1C240 or 1D201.*
1E202	*"Technology" according to the General Technology Note for the "development" or "production" of goods controlled by 1A202 or 1A225 to 1A227.*
1E203	*"Technology" according to the General Technology Note for the "development" of "software" controlled by 1D201.*
1E350	*"Technology" according to the "General Technology Note" for facilities designed or intended to produce chemicals controlled by 1C350.*
1E351	*"Technology" according to the "General Technology Note" for the disposal of chemicals or microbiological materials controlled by 1C350, 1C351, 1C352, 1C353, or 1C354.*
1E355	*"Technology" for the "production" of Chemical Weapons Convention (CWC) Schedule 2 and 3 chemicals.*
1E994	*"Technology" for the "development", "production", or "use" of fibrous and filamentary materials controlled by 1C990.*
2A001	*Anti-friction bearings and bearing systems, as follows, (see List of Items Controlled) and components therefor.*
2A225	*Crucibles made of materials resistant to liquid actinide metals.*

2A226	*Valves 5 mm or greater in "nominal size", with a bellows seal, wholly made of or lined with aluminum, aluminum alloy, nickel, or alloy containing 60% or more nickel, either manually or automatically operated.*
2A290	*Generators and other equipment specially designed, prepared, or intended for use with nuclear plants.*
2A291	*Equipment related to nuclear material handling and processing and to nuclear reactors.*
2A292	*Piping, fittings and valves made of, or lined with, stainless steel, copper-nickel alloy or other alloy steel containing 10% or more nickel and/or chromium.*
2A293	*Pumps designed to move molten metals by electromagnetic forces.*
2A991	*Bearings and bearing systems not controlled by 2A001*
2A993	*Explosive detection systems, consisting of an automated device, or combination of devices, with the ability to detect the presence of different types of explosives, in passenger checked baggage, without need for human skill, vigilance, or judgment.*
2A994	*Portable electric generators and specially designed parts ù*
2B001	*Machine tools and any combination thereof, for removing (or cutting) metals, ceramics or "composites", which, according to the manufacturer's technical specification, can be equipped with electronic devices for "numerical control".*
2B003	*"Numerically controlled" or manual machine tools, and specially designed components, controllers and accessories therefor, specially designed for the shaving, finishing, grinding or honing of hardened (Rc = 40 or more) spur, helical and double-helical gears with a pitch diameter exceeding 1,250 mm and a face width of 15% of pitch diameter or larger finished to a quality of AGMA 14 or better (equivalent to ISO 1328 class 3).*
2B004	*Hot "isostatic presses", having all of the following characteristics described in the List of Items Controlled, and specially designed components and accessories therefor.*
2B005	*Equipment specially designed for the deposition, processing and in-process control of inorganic overlays, coatings and surface modifications, as follows, for non-electronic substrates, by processes shown in the Table and associated Notes following 2E003.f, and specially designed automated handling, positioning, manipulation and control components therefor.*
02B006	*Dimensional inspection or measuring systems and equipment*
2B007	*"Robots" having any of the following characteristics described in the List of Items Controlled and specially designed controllers and "end-effectors" therefor.*
2B008	*Assemblies, units or inserts specially designed for machine tools, or for equipment controlled by 2B006 or 2B007.*
2B009	*Spin-forming machines and flow-forming machines, which, according to the manufacturer's technical specifications, can be equipped with "numerical control" units or a computer control.*
2B018	*Equipment on the International Munitions List.*
2B104	*Equipment and process controls designed or modified for densification and pyrolysis of structural composite rocket nozzles and reentry vehicle nose tips.*

2B109	*Flow-forming machines, other than those controlled by2B009, and specially designed components therefor.*
2B116	*Vibration test systems, equipment and components therefor*
2B201	*Machine tools, other than those controlled by 2B001 for removing or cutting metals, ceramics or "composites", which, according to manufacturer s technical specification, can be equipped with electronic for simultaneous "contouring control" in two or more axes.*
2B204	*"Isostatic presses," not controlled by 2B004 or 2B104,capable of achieving a maximum working pressure of 69 Mpa (10,000 psi) or greater and having a chamber cavity with an inside diameter in excess of 152 mm (6 inches) and specially designed dies, molds, and controls therefor.*
2B206	*Dimensional inspection machines, devices or systems, other than those controlled by 2B006.*
2B207	*"Robots" or "end-effectors", other than those controlled by 2B007, specially designed to comply with national safety standards applicable to handling high explosives (for example, meeting code ratings for high explosives) and specially designed controllers therefor.*
2B209	*Flow forming machines or spin forming machines capable of flow forming functions, other than those controlled by 2B009 or 2B109, or mandrels.*
2B225	*Remote manipulators that can be used to provide remote actions in radiochemical separation operations and hot cells.*
2B226	*Vacuum or controlled environment (inert gas) induction furnaces capable of operation above 1,123 K (850o C) and having induction coils 600 mm or less in diameter, and designed for power inputs of 5 kW or more, and power supplies specially designed therefor with a specified power output of 5 kW or more.*
2B227	*Vacuum and controlled atmosphere metallurgical melting and casting furnaces and specially configured computer control and monitoring systems therefor.*
2B228	*Rotor fabrication and assembly equipment and bellows-forming mandrels and dies.*
2B229	*Centrifugal multiplane balancing machines, fixed or portable, horizontal or vertical.*
2B230	*Pressure transducers" which are capable of measuring absolute pressure at any point in the range 0 to 13 kPa, with pressure sensing elements made of or protected by nickel, nickel alloys with more than 60% nickel by weight, aluminum or aluminum alloys.*
2B231	*Vacuum pumps with an input throat size of 380 mm or greater with a pumping speed of 15,000 liters/s or greater and capable of producing an ultimate vacuum better than 10 -4 Torr (1.33 x 10).*
2B232	*Multistage light gas guns or other high-velocity gun systems (coil, electromagnetic, electrothermal, or other advanced systems) capable of accelerating projectiles to 2 km/s or greater.*
2B290	*"Numerically controlled" machine tools not controlled by2B001.*
2B350	*Chemical manufacturing facilities and equipment.*
2B351	*Toxic gas monitoring systems and dedicated detectors therefor.*
2B352	*Equipment capable of use in handling biological materials*

2B991	*Numerical control units for machine tools and numerically controlled machine tools, n.e.s.*
2B992	*Non-"numerically controlled" machine tools for generating optical quality surfaces, and specially designed components thereof.*
2B993	*Gear making and/or finishing machinery not controlled by2B003 capable of producing gears to a quality level of better than AGMA 11.*
2B996	*Dimensional inspection or measuring systems or equipment not controlled by 2B006.*
2B997	*"Robots" not controlled by 2B007 or 2B207 that are capable of employing feedback information in real-time processing from one or more sensors to generate or modify "programs" or to generate or modify numerical program data.*
2B998	*Assemblies, units or inserts specially designed for machine tools controlled by 2B991, or for equipment controlled by 2B993, 2B996 or 2B997.*
2D001	*"Software", other than that controlled by 2D002,specially designed or modified for the "development", "production" or "use" of equipment controlled by 2A001 or 2B001 to 2B009.*
2D002	*"Software" for electronic devices, even when residing in an electronic device or system, enabling such devices or systems to function as a "numerical control" unit.*
2D018	*"Software" for the "development", "production" or "use" of equipment controlled by 2B018.*
2D101	*"Software" specially designed for the "use" of equipment controlled by 2B104, 2B109 or 2B116.*
2D201	*"Software" specially designed for the "use" of equipment controlled by 2B204, 2B206, 2B207, 2B209, 2B227 or 2B229.*
2D202	*"Software" specially designed or modified for the "development", "production" or "use" of equipment controlled by 2B201.*
2D290	*"Software" specially designed or modified for the "development", "production" or "use" of items controlled by 2A290, 2A291, 2A292, 2A293, or 2B290.*
2D991	*"Software" specially designed for the "development", "production", or "use" of equipment controlled by 2B991, 2B993, or 2B996, 2B997, and 2B998.*
2D992	*Adaptive control software.*
2D994	*"Software" specially designed for the "development" or "production" of portable electric generators controlled by 2A994.*
2E001	*"Technology" according to the General Technology Note for the "development" of equipment or "software" controlled by 2A (except 2A991, 2A993, or 2A994), 2B (except 2B991, 2B993, 2B996, 2B997, or 2B998), or 2D (except 2D991, 2D992, or 2D994).*
2E002	*"Technology" according to the General Technology Note for the "production" of equipment controlled by 2A (except 2A991, 2A993, or 2A994), or 2B (except 2B991, 2B993, 2B996, 2B997, or 2B998).*
2E003	*Other "technology".*
2E018	*"Technology" for the "use" of equipment controlled by2B018.*

2E101	*"Technology" according to the General Technology Note for the "use" of equipment or "software" controlled by 2B004, 2B009, 2B104, 2B109, 2B116, or 2D101.*
2E201	*"Technology" according to the General Technology Note for the "use" of equipment or "software" controlled by 2A225, 2A226, 2B001, 2B006, 2B007.b, 2B007.c, 2B008, 2B009, 2B201, 2B204, 2B207, 2B209, 2B225 to 2B232, 2D201 or 2D202.*
2E290	*"Technology" according to the General Technology Note for the "use" of equipment controlled by 2A290, 2A291, 2A292, 2A293, and 2B290.*
2E301	*"Technology" according to the "General Technology Note "for "use" of items controlled by 2B350, 2B351 and 2B352.*
2E991	*"Technology" for the "use" of equipment controlled by2B991, 2B993, 2B996, or 2B997.*
2E994	*"Technology" for the "use" of portable electric generators controlled by 2A994.*
3A001	*Electronic components.*
3A002	*General-purpose electronic equipment.*
3A101	*Electronic equipment, devices and components, other than those controlled by 3A001.*
3A201	*Electronic components, other than those controlled by 3A001.*
3A225	*Frequency changers (also known as converters or inverters) or generators, other than those controlled by 0B001.c.11.*
3A226	*Direct current high-power supplies, other than those controlled by 0B001.j.6, capable of continuously producing, over a time period of 8 hours, 100 V or greater with current output of 500 A or greater and with current or voltage regulation better than 0.1%.*
3A227	*High-voltage direct current power supplies, other than those controlled by 0B001.j.5, capable of continuously producing, over a time period of 8 hours, 20,000 V or greater with current output of 1 A or greater and with current or voltage regulation better than 0.1%.*
3A228	*Switching devices.*
3A229	*Firing sets and equivalent high current pulse generators (for detonators controlled by 3A232).*
3A230	*High-speed pulse generators with output voltages greater than 6 volts into a less than 55-ohm resistive load, and with pulse transition times less than 500 pico seconds.*
3A231	*Neutron generator systems, including tubes, designed for operation without an external vacuum system and utilizing electrostatic acceleration to induce a tritium-deuterium nuclear reaction.*
3A232	*Detonators and multipoint initiation systems.*
3A233	*Mass spectrometers, other than those controlled by0B002.g, capable of measuring ions of 230 atomic mass units or greater and having a resolution of better than 2 parts in 230, and ion sources therefor.*
3A292	*Oscilloscopes and transient recorders other than those controlled by 3A002.a.5, and specially designed components therefor.*
3A980	*Voice print identification and analysis equipment and parts, n.e.s.*

3A981	*Polygraphs (except biomedical recorders designed for use in medical facilities for monitoring biological and neurophysical responses); fingerprint analyzers, cameras and equipment, n.e.s.; automated fingerprint and identification retrieval systems, n.e.s.; psychological stress analysis equipment; electronic monitoring restraint devices; and specially designed parts and accessories, n.e.s.*
3A991	*Electronic devices and components not controlled by 3A001*
3A992	*General-purpose electronic equipment not controlled by3A002.*
3B001	*Equipment for the manufacturing of semiconductor devices or materials and specially designed components and accessories therefor.*
3B002	*"Stored program controlled" test equipment, specially designed for testing finished or unfinished semiconductor devices and specially designed components and accessories therefor.*
3B991	*Equipment not controlled by 3B001 for the manufacture of electronic components and materials, and specially designed components and accessories therefor.*
3B992	*Equipment not controlled by 3B002 for the inspection or testing of electronic components and materials, and specially designed components and accessories therefor.*
3C001	*Hetero-epitaxial materials consisting of a "substrate" having stacked epitaxially grown multiple layers.*
3C002	*Resist material and "substrates" coated with controlled resists.*
3C003	*Organo-inorganic compounds.*
3C004	*Hydrides of phosphorus, arsenic or antimony, having purity better than 99.999%, even diluted in inert gases or hydrogen.*
3C992	*Positive resists designed for semiconductor lithography specially adjusted (optimized) for use at wavelengths between 370 and 350 nm.*
3D001	*"Software" specially designed for the "development" or "production" of equipment controlled by 3A001.b to 3A002.g or 3B (except 3B991 and 3B992).*
3D002	*"Software" specially designed for the "use" of "stored program controlled" equipment controlled by 3B (except 3B991 and 3B992).*
3D003	*Computer-aided-design (CAD) "software" designed for semiconductor devices or integrated circuits.*
3D101	*"Software" specially designed for the "use" of equipment controlled by 3A101.b.*
3D102	*"Software" specially designed for the "development" or "production" of equipment controlled by 3A001.a.1.a or 3A101.*
3D980	*"Software" specially designed for the "development", "production", or "use" of items controlled by 3A980 and 3A981.*
3D991	*"Software" specially designed for the "development", "production", or "use" of electronic devices or components controlled by 3A991, general purpose electronic equipment controlled by 3A992, or manufacturing and test equipment controlled by 3B991 and 3B992.*

3E001	*"Technology" according to the General Technology Note fort he "development" or "production" of equipment or materials controlled by 3A (except 3A292, 3A980, 3A981, 3A991 or 3A992), 3B (except 3B991 and 3B992) or 3C.*
3E002	*Other "technology" for the "development" or "production" of items described in the List of Items Controlled.*
3E101	*"Technology" according to the General Technology Note for the "use" of equipment or "software" controlled by 3A001.a.1.a. or 3A101.*
3E102	*"Technology" according to the General Technology Note for the "development" of "software" controlled by 3D101.*
3E201	*Technology" according to the General Technology Note for the "use" of equipment controlled by 3A201, 3A225 to 3A233.*
3E292	*"Technology" according to the General Technology Note for the "development", "production", or "use" of equipment controlled by 3A292.*
3E980	*"Technology" specially designed for "development", "production", or "use" of items controlled by 3A980 and 3A981.*
3E991	*"Technology" for the "development", "production", or "use" of electronic devices or components controlled by 3A991, general-purpose electronic equipment controlled by 3A992, or manufacturing and test equipment controlled by 3B991 or 3B992.*
4A001	*Electronic computers and related equipment, and "electronic assemblies" and specially designed components therefor.*
4A002	*"Hybrid computers" and "electronic assemblies" and specially designed components therefor.*
4A003	*"Digital computers", "electronic assemblies", and related equipment therefor, and specially designed components therefor.*
4A004	*Computers as follows (see List of Items Controlled) and specially designed related equipment, "electronic assemblies" and components therefor.*
4A101	*Analog computers, "digital computers" or digital differential analyzers, other than those controlled by 4A001 designed or modified for use in "missiles".*
4A102	*"Hybrid computers" specially designed for modelling, simulation or design integration of "missiles". (These items are subject to the export licensing authority of the U.S. Department of State, Office of Defense Trade Controls. See 22 CFR part 121.).*
4A980	*Computers for fingerprint equipment, n.e.s.*
4A994	*Computers, "electronic assemblies", and related equipment not controlled by 4A001, 4A002, or 4A003, and specially designed components therefor.*
4B994	*Equipment for the "development" and "production" of magnetic and optical storage equipment.*
4C994	*Materials specially formulated for and required for the fabrication of head/disk assemblies for controlled magnetic and magneto-optical hard disk drives.*
4D001	*"Software" specially designed or modified for the "development", "production" or "use" of equipment or "software" controlled by 4A001 to 4A004, or 4D (except 4D980, 4D993 or 4D994).*

4D002	*"Software" specially designed or modified to support "technology" controlled by 4E (except 4E980, 4E992, and 4E993).*
4D003	*Specific "software".*
4D102	*"Software" specially designed or modified for the "development", "production" or "use" of equipment controlled by 4A101.*
4D980	*"Software" specially designed for the "development", "production", or "use" of items controlled by 4A980.*
4D993	*"Program" proof and validation "software", "software" allowing the automatic generation of "source codes", and operating system "software" not controlled by 4D003 that are specially designed for real time processing equipment.*
4D994	*"Software" specially designed or modified for the "development", "production", or "use" of equipment controlled by 4A994, 4B994 and materials controlled by 4C994.*
4E001	*"Technology" according to the General Technology Note, for the "development", "production" or "use" of equipment or "software" controlled by 4A (except 4A980, 4A993 or 4A994) or 4D (except 4D980, 4D993 or 4D994).*
4E980	*"Technology" for the "development", "production", or "use" of items controlled by 4A980.*
4E992	*"Technology" for the "development", "production", or "use" of equipment controlled by 4A994 and 4B994, materials controlled by 4C994, or "software" controlled by 4D993 or 4D994.*
4E993	*Other "Technology" for the "development" or "production" of graphics accelerators or equipment designed for "multi-data-stream processing" and "technology" "required" for the "development" or "production" of magnetic hard disk drives.*
5A001	*Telecommunications systems, equipment, and components*
5A002	*Systems, equipment, application specific "assemblies", modules or integrated circuits for "information security", and specially designed components therefor.*
5A101	*Telemetering and telecontrol equipment usable for "missiles".*
5A980	*Communications intercepting devices and parts and accessories therefor.*
5A991	*Telecommunication equipment not controlled by 5A001.*
5A992	*Equipment not controlled by 5A002.*
5B001	*Telecommunication test, inspection and production equipment, as follows (See List of Items Controlled).*
5B002	*Information Security - test, inspection and "production" equipment.*
5B991	*Telecommunications test equipment.*
5C001	*Preforms of glass or of any other material optimized for the manufacture of optical fibers controlled by 5A001.d.*
5D001	*"Software", as described in the List of Items Controlled*

5D002	*Information Security - "Software".*
5D101	*"Software" designed or modified for the "development", "production" or "use of items controlled by 5A101.*
5D991	*"Software" specially designed or modified for the "development", "production", or "use" of equipment controlled by 5A991 and 5B991.*
05D992	*"Information Security" "software" not controlled by 5D002*
5E001	*"Technology".*
05E002	*"Technology" according to the General Technology Note for the "development", "production" or "use" of equipment controlled by 5A002 or 5B002 or "software" controlled by 5D002.*
5E101	*"Technology" according to the General Technology Note for the "development", "production" or "use" of equipment controlled by 5A101.*
5E111	*"Technology" according to the General Technology Note for the "development", "production", or "use" of "software" controlled by 5D101.*
5E991	*"Technology" for the "development", "production" or "use" of equipment controlled by 5A991 or 5B991, or "software" controlled by 5D991.*
5E992	*"Information Security" "technology", not controlled by5E002.*
6A001	*Acoustics.*
6A002	*Optical sensors.*
6A003	*Cameras.*
6A004	*Optics.*
6A005	*"Lasers", components and optical equipment.*
6A006	*"Magnetometers", "magnetic gradiometers", "intrinsic magnetic gradiometers" and compensation systems, and specially designed components therefor.*
6A007	*Gravity meters (gravimeters) and gravity gradiometers.*
6A008	*Radar systems, equipment and assemblies having any of the characteristics (see List of Items Controlled), and specially designed components therefor.*
6A018	*Magnetic, pressure, and acoustic underwater detection devices specially designed for military purposes and controls and components therefor.*
6A102	*Radiation hardened detectors, other than those controlled by 6A002, for use in protecting against nuclear effects (e.g. electromagnetic pulse (EMP), X-rays, combined blast and thermal effects) and usable for "missiles", designed or rated to withstand radiation levels that meet or exceed a total irradiation dose of 5 x 105 rads (Si).*
6A107	*Gravity meters (gravimeters), gravity gradiometers, and specially designed components therefore, other than those controlled by 6A007.b and .c, designed or modified for airborne or marine use,*

	having a static or operational accuracy of 7 x 10 -6 m/sec2 (0.7 milligal) or better, and a time to steady-state registration of two minutes or less.
6A108	***Radar systems and tracking systems, other than those controlled by 6A008.***
6A202	***Photomultiplier tubes with a photocathode area of greater than 20 cm2 having an anode pulse rise time of less than 1ns.***
6A203	***Cameras and components, other than those controlled by 6A003.***
6A205	***"Lasers", other than those controlled 6A005.***
6A225	***Velocity interferometers for measuring velocities in excess of 1 km/s during time intervals of less than 10 microsecond.***
6A226	***Pressure sensors.***
6A991	***Marine or terrestrial acoustic equipment, n.e.s., capable of detecting or locating underwater objects or features or positioning surface vessels or underwater vehicles; and specially designed components, n.e.s.***
6A992	***Optical sensors not controlled by 6A002.***
6A994	***Optics not controlled by 6A004.***
6A995	***"Lasers", not controlled by 6A005 or 6A205.***
6A996	***"Magnetometers", n.e.s., having a "noise level"(sensitivity) lower (better) than 1.0 nT rms per square root Hz.***
6A997	***Gravity meters (gravimeters) for ground use, n.e.s.***
6A998	***Airborne radar equipment, n.e.s., and specially designed components therefor.***
6B004	***Optical equipment.***
6B007	***Equipment to produce, align and calibrate land-based gravity meters with a static accuracy of better than 0.1 mgal.***
6B008	***Pulse radar cross-section measurement systems having transmit pulse widths of 100 ns or less and specially designed components therefor.***
6B108	***Systems, other than those controlled by 6B008, specially designed for radar cross section measurement usable for "missiles" and other subsystems.***
6B995	***Specially designed or modified equipment, including tools, dies, fixtures or gauges, and other specially designed components and accessories therefor.***
6C002	***Optical sensor materials.***
6C004	***Optical materials.***
6C005	***Synthetic crystalline "laser" host material in unfinished form.***
6C992	***Optical-sensing fibers not controlled by 6A002.d.3, which are modified structurally to have a "beat length" of less than 500 mm (high birefringence).***

6C994	*Optical materials.*
6D001	*"Software" specially designed for the "development" or "production" of equipment controlled by 6A004, 6A005, 6A008 or 6B008.*
6D002	*"Software" specially designed for the "use" of equipment controlled by 6A002.b, 6A008 or 6B008.*
6D003	*Other "software".*
6D102	*"Software" specially designed for the "use" of goods controlled by 6A108.*
6D103	*"Software" that processes post-flight recorded data, obtained from the systems controlled by 6A108.b, enabling determination of vehicle position throughout its flight path.*
6D104	*"Software" specially designed for the "use" of equipment controlled by 6A002, 6A003, 6A007, 6A102, and 6B108, for MT reasons.*
6D991	*"Software" specially designed for the "development", "production", or "use" of equipment controlled by 6A991, 6A996, 6A997, or 6A998.*
6D992	*"Software" specially designed for the "development" or "production" of equipment controlled by 6A992, 6A994, or 6A995.*
6D993	*Other "software" not controlled by 6D003.*
6E001	*"Technology" according to the General Technology Note for the "development" of equipment, materials or "software" controlled by 6A (except 6A018, 6A991, 6A992, 6A994, 6A995, 6A996, 6A997, or 6A998), 6B (except 6B995), 6C (except 6C992 or 6C994), or 6D (except 6D991, 6D992, or 6D993.*
6E002	*"Technology" according to the General Technology Note for the "production" of equipment or materials controlled by 6A (except 6A018, 6A991, 6A992, 6A994, 6A995, 6A996, 6A997 or 6A998), 6B (except 6B995) or 6C (except 6C992 or 6C994).*
6E003	*Other "technology".*
6E101	*"Technology" according to the General Technology Note for the "use" of equipment or "software" controlled by 6A002, 6A007.b and .c, 6A008, 6A102, 6A107, 6A108, 6B108, 6D102 or 6D103.*
6E102	*"Technology" according to the General Technology Note for the "use" of "software" controlled by 6D001 and 6D002, for MT reasons.*
6E201	*"Technology" according to the General Technology Note for the "use" of equipment controlled by 6A003.a.2, 6A003.a.3, 6A003.a.4, 6A005.a.1.c, 6A005.a.2.a, 6A005.c.1.b, 6A005.c.2.c.2, 6A005.c.2.d.2.b, 6A202, 6A203, 6A205, 6A225 or 6A226.*
6E991	*"Technology" for the "development", "production" or "use" equipment controlled by 6A991, 6A996, 6A997, or 6A998.*
6E992	*"Technology" for the "development" or "production" of equipment, materials or "software" controlled by 6A992, 6A994, or 6A995, 6B995, 6C992, 6C994, or 6D993.*
6E993	*Other "technology", not controlled by 6E003.*

7A001	*Accelerometers designed for use in inertial navigation or guidance systems and having any of the following characteristics (see List of Items Controlled) and specially designed components therefor.*
7A002	*Gyros having any of the following characteristics (see List of Items Controlled), and specially designed components therefor.*
7A003	*Inertial navigation systems (gimbaled or strapdown) and inertial equipment designed for "aircraft", land vehicle or "spacecraft" for attitude, guidance or control, having any of the following characteristics (see List of Items Controlled), and specially designed components therefor.*
7A004	*Gyro-astro compasses, and other devices which derive position or orientation by means of automatically tracking celestial bodies or satellites, with an azimuth accuracy of equal to or less (better) than 5 seconds of arc.*
7A005	*Global navigation satellite systems (i.e. GPS or GLONASS) receiving equipment, and specially designed components therefor. (These items are subject to the export licensing authority of the U.S. Department of State, Office of Defense Trade Controls. See 22 CFR part 121.).*
7A006	*Airborne altimeters operating at frequencies other than4.2 to 4.4 GHz inclusive.*
7A007	*Direction finding equipment operating at frequencies above 30 MHz and specially designed components therefor. (These items are subject to the export licensing authority of the U.S. Department of State, Office of Defense Trade Controls. See 22 CFR part 121.).*
7A101	*Accelerometers, other than those controlled by 7A001,with a threshold of 0.05 g or less, or a linearity error within 0.25% of full scale output, or both, which are designed for use in inertial navigation systems or in guidance systems of all types and specially designed components therefor.*
7A102	*All types of gyros, other than those controlled by 7A002,usable in "missiles", with a rated "drift rate" "stability" of less than 0.5_ (1 sigma or rms) per hour in a 1 g environment and specially designed components therefor.*
7A103	*Instrumentation, navigation equipment and systems, other than those controlled by 7A003, and specially designed components therefor.*
7A104	*Gyro-astro compasses and other devices, other than those controlled by 7A004, which derive position or orientation by means of automatically tracking celestial bodies or satellites and specially designed components therefor.*
7A105	*Global Positioning Systems (GPS) or similar satellite receivers, other than those controlled by 7A005, and designed or modified for use in "missiles". (These items are subject to the export licensing authority of the U.S. Department of State, Office of Defense Trade Controls.*
7A106	*Altimeters, other than those controlled by 7A006, of radar or laser radar type, designed or modified for use in "missiles". (These items are subject to the export licensing authority of the U.S. Department of State, Office of Defense Trade Controls. See 22 CFR part 121.).*
7A115	*Passive sensors for determining bearing to specific electromagnetic source (direction finding equipment) or terrain characteristics, designed or modified for use in "missiles". (These items are subject to the export licensing authority of the U.S. Department of State, Office of Defense Trade Controls. See 22 CFR part 121.).*
7A116	*Flight control systems (hydraulic, mechanical, electro-optical, or electro-mechanical flight control systems (including fly-by-wire systems) and attitude control equipment) designed or modified for "missiles". (These items are subject to the export licensing authority of the U.S. Department of State, Office of Defense Trade Controls. See 22 CFR part 121.).*

7A117	*"Guidance sets" capable of achieving system accuracy of3.33% or less of the range (e.g., a "CEP" of 10 km or less at a range of 300 km). (These items are subject to the export licensing authority of the U.S. Department of State, Office of Defense Trade Controls. See 22 CFR part 121.).*
7A994	*Other navigation direction finding equipment, airborne communication equipment, all aircraft inertial navigation systems not controlled under 7A003 or 7A103, and other avionics equipment, including parts and components, n.e.s.*
7B001	*Test, calibration or alignment equipment specially designed for equipment controlled by 7A (except 7A994).*
7B002	*Equipment, as follows (see List of Items Controlled), specially designed to characterize mirrors for ring "laser" gyros.*
7B003	*Equipment specially designed for the "production" of equipment controlled by 7A (except 7A994).*
7B101	*"Production equipment", and other test, calibration, and alignment equipment, other than that described in 7B003, 7B102 and 7B104, designed or modified to be used with equipment controlled by 7A004 or 7A104.*
7B102	*Equipment, other than those controlled by 7B002, designed or modified to characterize mirrors, for laser gyro equipment, as follows (see List of Items Controlled).*
7B103	*Specially designed "production facilities" for equipment controlled by 7A117.*
7B104	*Equipment designed or modified to be used with equipment controlled by 7A004, or 7A104, as follows (see List of Items Controlled).*
7B994	*Other equipment for the test, inspection, or "production" of navigation and avionics equipment.*
7D001	*"Software" specially designed or modified for the "development" or "production" of equipment controlled by 7A (except 7A994) or 7B (except 7B994).*
7D002	*"Source code" for the "use" of any inertial navigation equipment or Attitude and Heading Reference Systems (AHRS) (except gimbaled AHRS) including inertial equipment not controlled by 7A003 or 7A004.*
7D003	*Other "software".*
7D101	*"Software" specially designed for the "use" of equipment controlled by 7A001 to 7A006, 7A101 to 7A106, 7A115, 7B001, 7B002, 7B003, 7B101, 7B102, 7B103, or 7B104.*
7D102	*Integration "software" for the equipment controlled by7A003 or 7A103.*
7D103	*"Software" specially designed for modeling or simulation of the "guidance sets" controlled by 7A117 or for their design integration with "missiles". (This entry is subject to the export licensing authority of the U.S. Department of State, Office of Defense Trade Controls. See 22 CFR part 121.).*
7D994	*"Software", n.e.s., for the "development", "production", or "use" of navigation, airborne communication and other avionics.*
7E001	*"Technology" according to the General Technology Note for the "development" of equipment or "software" controlled by 7A (except 7A994), 7B (except 7B994) or 7D (except 7D994).*

7E002	*"Technology" according to the General Technology Note for the "production" of equipment controlled by 7A (except 7A994) or 7B (except 7B994).*
7E003	*"Technology" according to the General Technology Note for the repair, refurbishing or overhaul of equipment controlled by 7A001 to 7A004.*
7E004	*Other "technology".*
7E101	*"Technology", other than "technology" controlled by7E003, according to the General Technology Note for the "use" of equipment controlled by 7A001 to 7A006, 7A101 to 7A106, 7A115 to 7A117, 7B001, 7B002, 7B003, 7B101, 7B102, 7B103, 7B104, 7D101 to 7D103.*
7E102	*"Technology" for protection of avionics and electrical subsystems against electromagnetic pulse (EMP) and electromagnetic interference (EMI) hazards, from external sources.*
7E104	*"Technology" for the integration of the flight control, guidance, and propulsion data into a flight management system for optimization of rocket system trajectory. (This entry is subject to the export licensing authority of the U.S. Department of State, Office of Defense Trade Controls. See 22 CFR part 121.).*
7E994	*"Technology", n.e.s., for the "development", "production", or "use" of navigation, airborne communication, and other avionics equipment.*
8A001	*Submersible vehicles and surface vessels.*
8A002	*Systems and equipment.*
8A018	*Items on the International Munitions List.*
8A992	*Underwater systems or equipment, not controlled by 8A002,and specially designed parts therefor.*
8B001	*Water tunnels, having a background noise of less than 100dB (reference 1 _Pa, 1 Hz) in the frequency range from 0 to 500 Hz, designed for measuring acoustic fields generated by a hydro-flow around propulsion system models.*
8C001	*Syntactic foam designed for underwater use.*
8D001	*"Software" specially designed or modified for the "development", "production" or "use" of equipment or materials controlled by 8A (except 8A992), 8B or 8C.*
8D002	*Specific "software" specially designed or modified for the "development", "production", repair, overhaul or refurbishing (re-machining) of propellers specially designed for underwater noise reduction.*
8D992	*"Software" specially designed or modified for the "development", "production" or "use" of equipment controlled by 8A992.*
8E001	*"Technology" according to the General Technology Note for the "development" or "production" of equipment or materials controlled by 8A (except 8A992), 8B or 8C.*
8E002	*Other "technology".*
8E992	*"Technology" for the "development", "production" or "use" of equipment controlled by 8A992.*
9A001	*Aero gas turbine engines incorporating any of the "technologies" controlled by 9E003.a.*

9A002 ***Marine gas turbine engines with an ISO standard continuous power rating of 24,245 kW or more and a specific fuel consumption not exceeding 0.219 kg/kWh in the power range from 35 to 100%, and specially designed assemblies and components therefor.***

9A003 ***Specially designed assemblies and components, incorporating any of the "technologies" controlled by 9E003.a, for gas turbine engine propulsion systems.***

9A004 ***Space launch vehicles and "spacecraft".***

9A005 ***Liquid rocket propulsion systems containing any of the systems or components controlled by 9A006. (These items are subject to the export licensing authority of the U.S. Department of State, Office of Defense Trade Controls. See 22 CFR part 121.).***

9A006 ***Systems and components specially designed for liquid rocket propulsion systems. (These items are subject to the export licensing authority of the U.S. Department of State, Office of Defense Trade Controls. See 22 CFR part 121.).***

9A007 ***Solid rocket propulsion systems. (These items are subject to the export licensing authority of the U.S. Department of State, Office of Defense Trade Controls. See 22 CFR part 121.).***

9A008 ***Components specially designed for solid rocket propulsion systems. (These items are subject to the export licensing authority of the U.S. Department of State, Office of Defense Trade Controls. See 22 CFR part 121.).***

9A009 ***Hybrid rocket propulsion systems. (These items are subject to the export licensing authority of the U.S. Department of State, Office of Defense Trade Controls. See 22 CFR part 121.).***

9A010 ***Specially designed components, systems and structures for launch vehicles, launch vehicle propulsion systems or "spacecraft". (These items are subject to the export licensing authority of the U.S. Department of State, Office of Defense Trade Controls. See 22 CFR part 121.).***

9A011 ***Ramjet, scramjet or combined cycle engines and specially designed components therefor. (These items are subject to the export licensing authority of the U.S. Department of State, Office of Defense Trade Controls. See 22 CFR part 121.).***

9A018 ***Equipment on the International Munitions List.***

9A101 ***Lightweight turbojet and turbofan engines (including turbocompound engines) usable in "missiles", other than those controlled by 9A001.***

9A104 ***Sounding rockets, capable of a range of at least 300 km. (These items are subject to the export licensing authority of the U.S. Department of State, Office of Defense Trade Controls. See 22 CFR part 121.).***

9A105 ***Liquid propellant rocket engines. (These items are subject to the export licensing authority of the U.S. Department of State, Office of Defense Trade Controls. See 22 CFR part 121.).***

9A106 ***Liquid rocket propulsion systems or components, other than those controlled by 9A006, usable in rockets with a range capability of 30 Km or greater.***

9A107 ***Solid propellant rocket engines, usable in rockets with arrange capability of 300 Km or greater, other than those controlled by 9A007, having total impulse capacity of 0.841 Mns or greater. (These items are subject to the export licensing authority of the U.S. Department of State, Office of Defense Trade Controls. See 22 CFR part 121.).***

9A108	*Solid rocket propulsion components, other than those controlled by 9A008, usable in rockets with a range capability of 300 Km or greater. (These items are subject to the export licensing authority of the U.S. Department of State, Office of Defense Trade Controls. See 22 CFR part 121.).*
9A109	*Hybrid rocket motors, usable in rockets with a range capability of 300 Km or greater, other than those controlled by 9A009, and specially designed components therefor. (These items are subject to the export licensing authority of the U.S. Department of State, Office of Defense Trade Controls. See 22 CFR part 121.).*
9A110	*Composite structures, laminates and manufactures thereof, other than those controlled by entry 9A010, specially designed for use in "missiles" or the subsystems controlled by entries 9A005, 9A007, 9A105.a, 9A106 to 9A108, 9A116 or 9A119, and resin impregnated fiber prepregs and metal coated fiber preforms therefor, made either with organic matrix or metal matrix utilizing fibrous or filamentary reinforcements having a specific tensile strength greater than 7.62 x 104 m and a specific modulus greater than 3.18 x 106 m.*
9A111	*Pulse jet engines, usable in "missiles", and specially designed components therefor. (These items are subject to the export licensing authority of the U.S. Department of State, Office of Defense Trade Controls. See 22 CFR part 121.).*
9A115	*Launch support equipment, designed or modified for "missiles". (These items are subject to the export licensing authority of the U.S. Department of State, Office of Defense Trade Controls. See 22 CFR part 121.).*
9A116	*Reentry vehicles, usable in "missiles" and equipment designed or modified therefor. (These items are subject to the export licensing authority of the U.S. Department of State, Office of Defense Trade Controls. See 22 CFR part 121.).*
9A117	*Staging mechanisms, separation mechanisms, and interstages, usable in "missiles". (These items are subject to the export licensing authority of the U.S. Department of State, Office of Defense Trade Controls. See 22 CFR part 121.).*
9A118	*Devices to regulate combustion usable in engines that are usable in rockets with a range capability greater than 300 Km or greater controlled by 9A011 or 9A111. (These items are subject to the export licensing authority of the U.S. Department of State, Office of Defense Trade Controls. See 22 CFR part 121.).*
9A119	*Individual rocket stages, usable in rockets with a range capability greater than 300 Km or greater, other than those controlled by 9A005, 9A007, 9A009, 9A105, 9A107 and 9A109. (These items are subject to the export licensing authority of the U.S. Department of State, Office of Defense Trade Controls. See 22 CFR part 121.).*
9A120	*Non-military unmanned air vehicle systems (UAVs) and remotely piloted vehicles (RPVs) that are capable of a maximum range of at least 300 kilometers (km), regardless of payload.*
9A980	*Nonmilitary mobile crime science laboratories; and parts and accessories, n.e.s.*
9A990	*Diesel engines, n.e.s., and tractors and specially designed parts therefor, n.e.s.*
9A991	*"Aircraft", n.e.s., and gas turbine engines not controlled by 9A001 or 9A101 and parts and components, n.e.s.*
9A992	*Complete canopies, harnesses, and platforms and electronic release mechanisms therefor, except such types as are in normal sporting use.*

9B001	*Specially designed equipment, tooling and fixtures, as follows (see List of Items Controlled), for manufacturing or measuring gas turbine blades, vanes or tip shroud castings.*
9B002	*On-line (real time) control systems, instrumentation (including sensors) or automated data acquisition and processing equipment, specially designed for the "development" of gas turbine engines, assemblies or components incorporating "technologies" controlled by 9E003.a.*
9B003	*Equipment specially designed for the "production" or test of gas turbine brush seals designed to operate at tip speeds exceeding 335 m/s, and temperatures in excess of 773 K (500_C), and specially designed components or accessories therefor.*
9B004	*Tools, dies or fixtures for the solid state joining of "superalloy", titanium or intermetallic airfoil-to-disk combinations described in 9E003.a.3 or 9E003.a.6 for gas turbines.*
9B005	*On-line (real time) control systems, instrumentation (including sensors) or automated data acquisition and processing equipment, specially designed for use with any of the following wind tunnels or devices.*
9B006	*Acoustic vibration test equipment capable of producing sound pressure levels of 160 Db or more (referenced to 20 uPa) with a rated output of 4 kW or more at a test cell temperature exceeding 1,273 K (1,000_C), and specially designed quartz heaters therefor.*
9B007	*Equipment specially designed for inspecting the integrity of rocket motors using non-destructive test (NDT) techniques other than planar X-ray or basic physical or chemical analysis.*
9B008	*Transducers specially designed for the direct measurement of the wall skin friction of the test flow with a stagnation temperature exceeding 833 K (560_C).*
9B009	*Tooling specially designed for producing turbine engine powder metallurgy rotor components capable of operating at stress levels of 60% of ultimate tensile strength (UTS) or more and metal temperatures of 873 K (600_C) or more.*
9B105	*Wind tunnels for speeds of Mach 0.9 or more, usable for "missiles" and their subsystems.*
9B106	*Environmental chambers and anechoic chambers.*
9B115	*Specially designed "production equipment" for the systems, sub-systems and components controlled by 9A005 to 9A009, 9A011, 9A101, 9A105 to 9A109, 9A111, and 9A116 to 9A119. (These items are subject to the export licensing authority of the U.S. Department of State, Office of Defense Trade Controls. See 22 CFR part 121.).*
9B116	*Specially designed "production facilities" for the systems, sub-systems, and components controlled by 9A004 to 9A009, 9A011, 9A101, 9A104 to 9A109, 9A111, and 9A116 to 9A119. (These items are subject to the export licensing authority of the U.S. Department of State, Office of Defense Trade Controls. See 22 CFR part 121.).*
9B117	*Test benches and test stands for solid or liquid propellant rockets or rocket motors.*
9B990	*Vibration test equipment and specially designed parts and components, n.e.s.*
9B991	*Specially designed equipment, tooling or fixtures, not controlled by 9B001, as described in the List of Items Controlled, for manufacturing or measuring gas turbine blades, vanes or tip shroud castings.*
9D001	*"Software" required for the "development" of equipment or "technology" controlled by 9A (except 9A018, 9A990 or 9A991), 9B (except 9B990 or 9B991) or 9E003.*

9D002	*"Software" required for the "production" of equipment controlled by 9A (except 9A018, 9A990 or 9A991) or 9B (except 9B990 or 9B991).*
9D003	*"Software" required for the "use" of full authority digital electronic engine controls (FADEC) for propulsion systems controlled by 9A (except 9A018, 9A990 or 9A991) or equipment controlled by 9B (except 9B990 or 9B991).*
9D004	*Other "software".*
9D018	*"Software" for the "use" of equipment controlled by9A018.*
9D101	*"Software" specially designed for the "use" of goods controlled by 9B105, 9B106, 9B116 or 9B117.*
9D102	*"Software" specially designed for the "use" of items controlled by 9A101, 9A106, 9A110, and 9A120.*
9D103	*"Software" specially designed for modeling, simulation or design integration of "missiles", or the subsystems controlled by 9A005, 9A007, 9A105.a, 9A106, 9A108, 9A116 or 9A119. (This entry is subject to the export licensing authority of the U.S. Department of State, Office of Defense Trade Controls. See 22 CFR part 121.).*
9D990	*"Software", n.e.s., for the "development" or "production" of equipment controlled by 9A990 or 9B990.*
9D991	*"Software", for the "development" or "production" of equipment controlled by 9A991 or 9B991.*
9E001	*"Technology" according to the General Technology Note for the "development" of equipment or "software" controlled by 9A001.c, 9A004 to 9A011, 9B (except 9B990 or 9B991), or 9D (except 9D990 or 9D991).*
9E002	*"Technology" according to the General Technology Note for the "production" of equipment controlled by 9A001.c, 9A004 to 9A011 or 9B (except 9B990 or 9B991).*
9E003	*Other "technology".*
9E018	*"Technology" for the "development", "production", or "use" of equipment controlled by 9A018.*
9E101	*"Technology" according to the General Technology Note for the "development" or "production" of goods controlled by 9A101, 9A104 to 9A111 or 9A115 to 9A120.*
9E102	*"Technology" according to the General Technology Note for the "use" of goods controlled by 9A004 to 9A011, 9A101, 9A104 to 9A111, 9A115 to 9A120, 9B105, 9B106, 9B115, 9B116, 9B117, 9D101 or 9D103.*
9E990	*"Technology", n.e.s., for the "development" or "production" or "use" of equipment controlled by 9A990 or 9B990.*
9E991	*"Technology", for the "development", "production" or “use" of equipment controlled by 9A991 or 9B991.8*